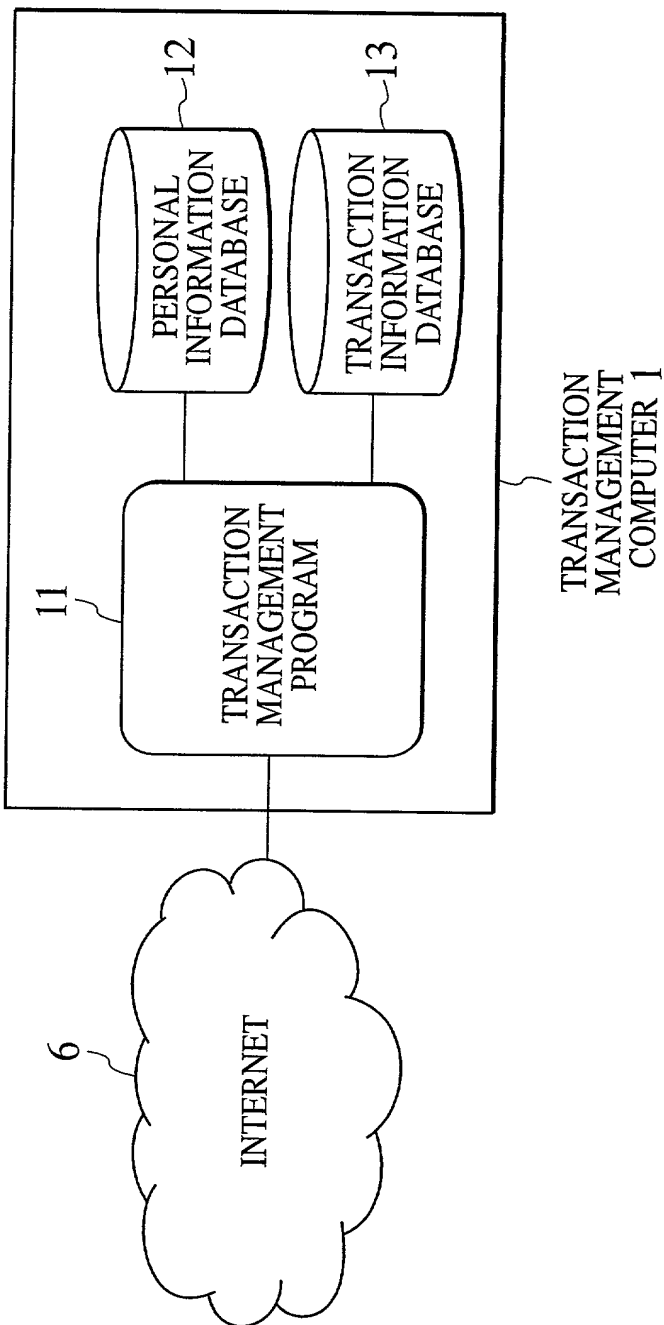


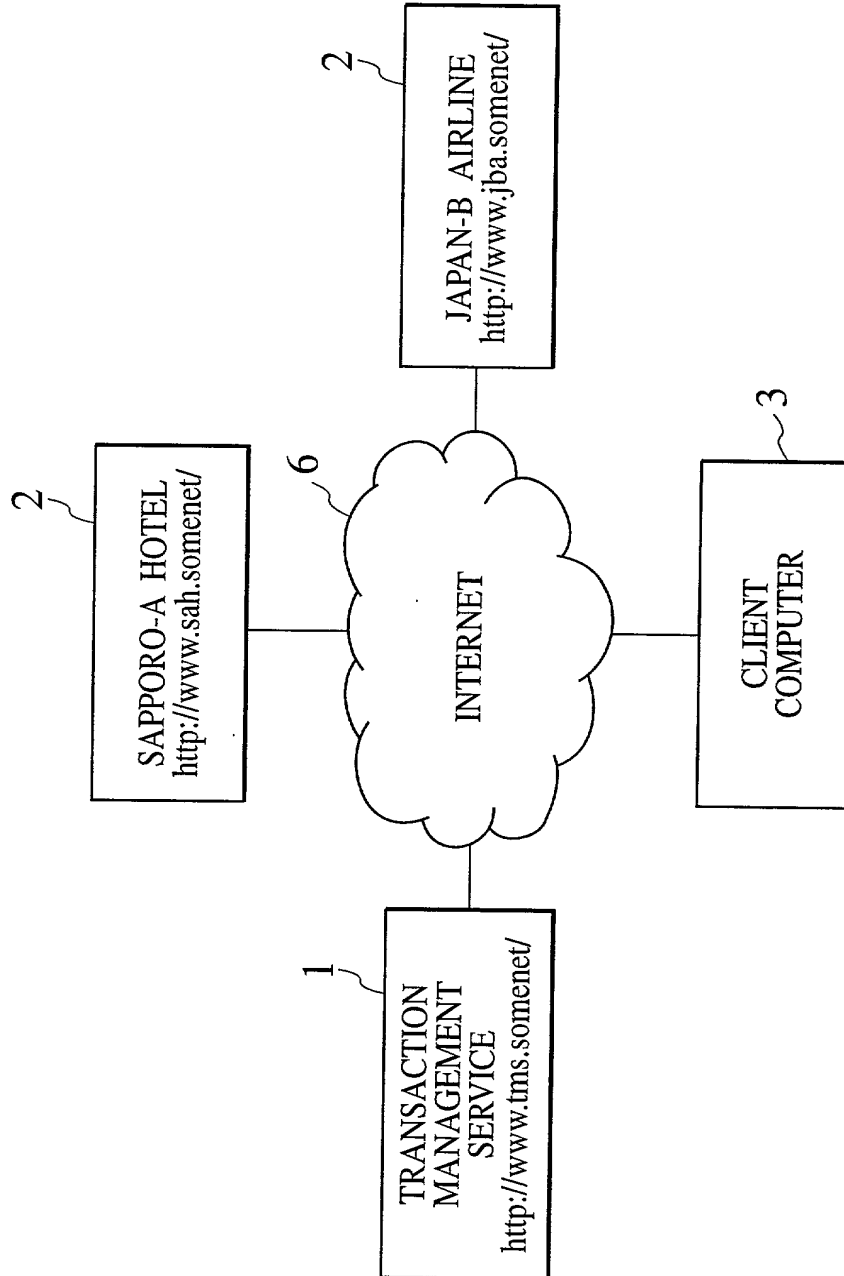
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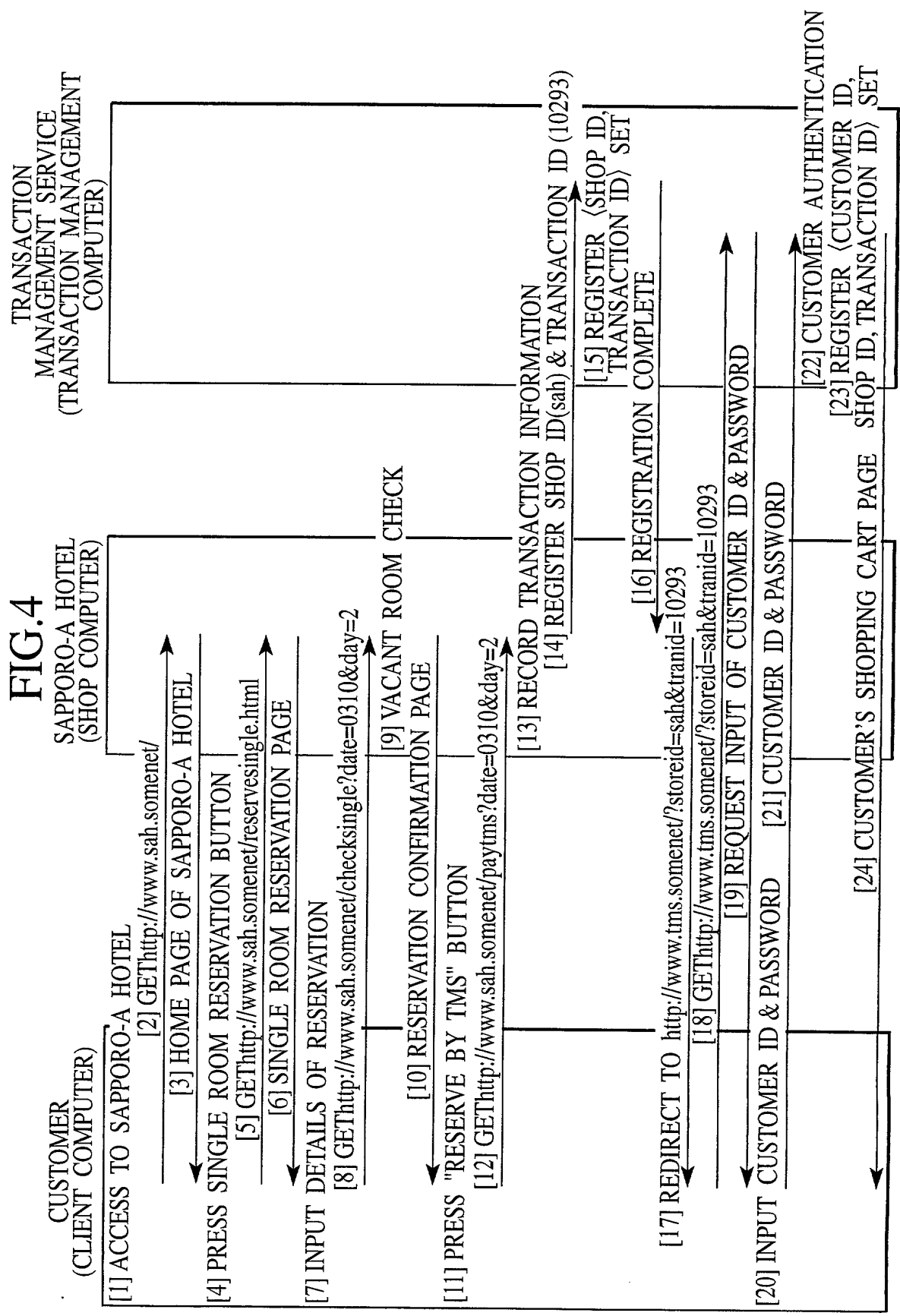
FIG.2



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FIG.3





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FIG.5

<http://www.sah.somenet/>

SAPPORO-A HOTEL

► INTERNET RESERVATION SERVICE

SINGLE ¥10,000 (PER NIGHT, WITH BREAKFAST)

TWIN ¥18,000 (PER NIGHT, WITH BREAKFAST)

DELUXE TWIN ¥25,000 (PER NIGHT, WITH BREAKFAST)

► AVAILABLE FACILITY GUIDE

FRENCH RESTAURANT EPHEMERAL
JAPANESE CUISINE NAGORI-YUKI
COFFEE SHOP CRYSTAL

FIG.6

<http://www.sah.somenet/reservesingle.html>

SAPPORO-A HOTEL INTERNET RESERVATION SERVICE

SINGLE ¥10,000 (PER NIGHT, WITH BREAKFAST)

DATES: DAYS FROM

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FIG.7

A screenshot of a web browser window showing the SAPPORO-A HOTEL INTERNET RESERVATION SERVICE. The address bar contains the URL <http://www.sah.somenet/reservesingle.html>. The page title is "SAPPORO-A HOTEL INTERNET RESERVATION SERVICE". Below the title, it displays "SINGLE ¥10,000 (PER NIGHT, WITH BREAKFAST)". The "DATES:" section shows a selection of "2" days from "MARCH" 10. At the bottom right, there is a button labeled "VACANT ROOM CHECK".

<http://www.sah.somenet/reservesingle.html>

SAPPORO-A HOTEL INTERNET RESERVATION SERVICE

SINGLE ¥10,000 (PER NIGHT, WITH BREAKFAST)

DATES: DAYS FROM

FIG.8

A screenshot of a web browser window showing the SAPPORO-A HOTEL INTERNET RESERVATION SERVICE check page. The address bar contains the URL <http://www.sah.somenet/checksingle>. The page title is "SAPPORO-A HOTEL INTERNET RESERVATION SERVICE". Below the title, it displays "SINGLE ¥10,000 (PER NIGHT, WITH BREAKFAST)". The status message reads "2 DAYS FROM MARCH 10 A ROOM IS AVAILABLE". At the bottom, there are two buttons: "RESERVE" and "RESERVE BY TMS".

<http://www.sah.somenet/checksingle>

SAPPORO-A HOTEL INTERNET RESERVATION SERVICE

SINGLE ¥10,000 (PER NIGHT, WITH BREAKFAST)

2 DAYS FROM MARCH 10
A ROOM IS AVAILABLE

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FIG.9

CUSTOMER ID	SHOP ID	TRANSACTION ID	COMMITMENT DATE & TIME	REGISTRATION DATE & TIME	STATE	CART MESSAGE	COMPLETION MESSAGE
	sah	10293		1999/12/23 10:34	ACTIVE	ROOM FOR 2 DAYS FROM MARCH 10, ¥20,000	
hiroshi.yamada	raptorgift	93849	1999/12/17 19:46	1999/12/17 19:44	COMMITTED	ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800	FOLLOWING ORDERS ARE COMPLETED. ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800
hiroshi.yamada	abcflower	230	1999/12/3 15:12	1999/12/3 15:11	COMMITTED	10 ROSES, ¥500 10 STOCKS, ¥700	FOLLOWING ORDERS ARE COMPLETED. 10 ROSES, ¥500 10 STOCKS, ¥700
hiroshi.yamada	xyzfood	4928	1999/12/3 15:12	1999/12/3 15:10	COMMITTED	10Kg RICE, ¥4,500	FOLLOWING ORDERS ARE COMPLETED. 10Kg RICE, ¥4,500
taro.tanaka	xyzfood	5932		1999/12/10 17:26	ABORTED	1 BOX NOODLES, ¥5,000	
taro.tanaka	abcflower	489	1999/12/5 15:43	1999/12/5 15:42	COMMITTED	BOUQUET, ¥3,500	FOLLOWING ORDERS ARE COMPLETED. BOUQUET, ¥3,500

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FIG.10

A screenshot of a web browser window showing the Transaction Management Service login page. The address bar contains the URL `http://www.tms.somenet/`. The page title is "TRANSACTION MANAGEMENT SERVICE". Below the title, there are two input fields: "USER ID" and "PASSWORD". A "START" button is located at the bottom right of the form area.

http://www.tms.somenet/

TRANSACTION MANAGEMENT SERVICE

USER ID

PASSWORD

START

FIG.11

A screenshot of the same Transaction Management Service login page as FIG.10, but with user input. The "USER ID" field contains the text "hiroshi.yamada" and the "PASSWORD" field contains ten asterisks "*****". The "START" button remains at the bottom right.

http://www.tms.somenet/

TRANSACTION MANAGEMENT SERVICE

USER ID

PASSWORD

START

FIG.12

CUSTOMER ID	PASSWORD	NAME	ADDRESS	PHONE NUMBER	MAIL ADDRESS	ACCOUNT NUMBER
hiroshi.yamada	*****	HIROSHI YAMADA	1 Komukai- Toshiba-Cho, Miyuki-Ku, Kawasaki	012-345-6789	hyamada@mail.somenet	123-456-789012
taro.tanaka	*****	TARO TANAKA	25 Umibe-Cho, Yamashita-Ku, Yokohama	123-456-7890	ttanaka@host.any.net	234-567-890123

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FIG.13

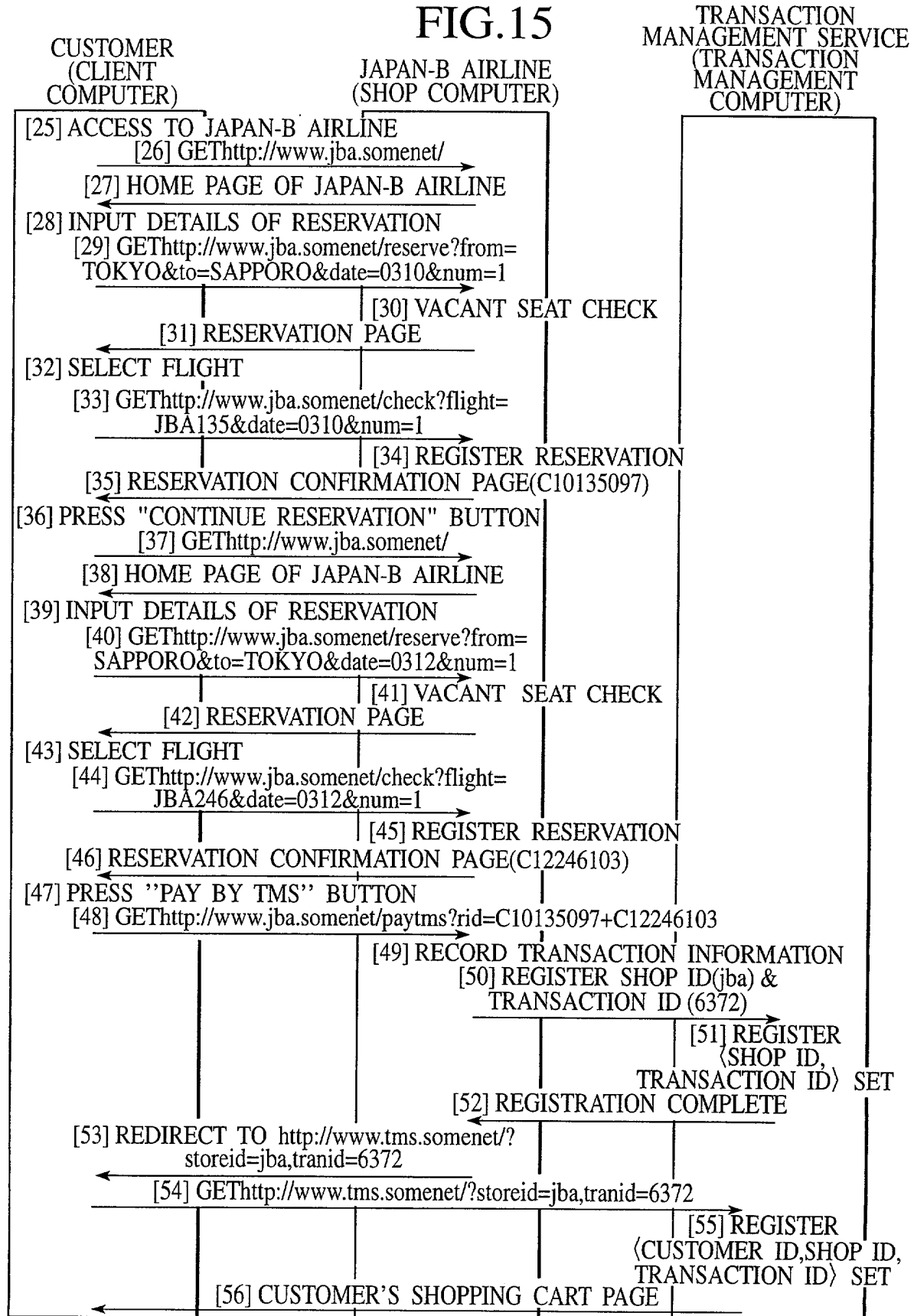
CUSTOMER ID	SHOP ID	TRANSACTION ID	COMMITMENT DATE & TIME	REGISTRATION DATE & TIME	STATE	CART MESSAGE	COMPLETION MESSAGE
hiroshi.yamada	sah	10293		1999/12/23 10:34	ACTIVE	ROOM FOR 2 DAYS FROM MARCH 10, ¥20,000	
hiroshi.yamada	raptorgift	93849	1999/12/17 19:46	1999/12/17 19:44	COMMITTED	ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800	FOLLOWING ORDERS ARE COMPLETED. ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800
hiroshi.yamada	abcflower	230	1999/12/3 15:12	1999/12/3 15:11	COMMITTED	10 ROSES, ¥500 10 STOCKS, ¥700	FOLLOWING ORDERS ARE COMPLETED. 10 ROSES, ¥500 10 STOCKS, ¥700
hiroshi.yamada	xyzfood	4928	1999/12/3 15:12	1999/12/3 15:10	COMMITTED	10Kg RICE, ¥4,500	FOLLOWING ORDERS ARE COMPLETED. 10Kg RICE, ¥4,500
taro.tanaka	xyzfood	5932		1999/12/10 17:26	ABORTED	1 BOX NOODLES, ¥5,000	
taro.tanaka	abcflower	489	1999/12/5 15:43	1999/12/5 15:42	COMMITTED	BOUQUET, ¥3,500	FOLLOWING ORDERS ARE COMPLETED. BOUQUET, ¥3,500

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FIG.14

http://www.tms.somenet/			
TRANSACTION STATUS OF HIROSHI YAMADA			
▶ ITEMS CURRENTLY IN SHOPPING CART			
TOTAL	¥20,000	COLLECTIVELY COMMIT	COLLECTIVELY ABORT
SAPPORO-A HOTEL ROOM FOR 2DAYS FROM MARCH 10, ¥20,000		SEPARATELY COMMIT	SEPARATELY ABORT
▶ PAST TRANSACTIONS			
THIS MONTH (DECEMBER, 1999)			
LAST MONTH (NOVEMBER, 1999)			
OLDER TRANSACTIONS			

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FIG.15



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FIG.16

http://www.jba.somenet/

JAPAN-B AIRLINE

INTERNET RESERVATION SERVICE

DATE:

FROM TO

NUMBER OF SEATS

FIG.17

http://www.jba.somenet/

JAPAN-B AIRLINE

INTERNET RESERVATION SERVICE

DATE:

FROM TO

NUMBER OF SEATS

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FIG.18

http://www.jba.somenet/reserve				
JAPAN-B AIRLINE				
<u>SEAT AVAILABILITY STATUS</u>				
DATE : MARCH 10, FROM TOKYO TO SAPPORO, 1 SEAT				
FLIGHT NO.	DEPARTING	ARRIVING		
JBA135	7:00	8:00	AVAILABLE	<input type="button" value="RESERVE"/>
JBA137	10:00	11:00	FULL	
JBA139	14:00	15:00	FULL	
JBA141	17:00	18:00	AVAILABLE	<input type="button" value="RESERVE"/>

FIG.19

http://www.jba.somenet/check	
JAPAN-B AIRLINE	
<u>RESERVATION CONFIRMATION</u>	
DATE : MARCH 10, FROM TOKYO TO SAPPORO, 1 SEAT	
FLIGHT NO.	DEPARTING ARRIVING
JBA135	7:00 8:00
IF YOU WISH TO CONTINUE RESERVATION,	<input type="button" value="CONTINUE RESERVATION"/>
IF YOU WISH TO GO TO PAYMENT, AND:	
WANT TO USE TMS FOR PAYMENT,	<input type="button" value="PAY BY TMS"/>
WANT TO USE OTHER WAYS OF PAYMENT,	<input type="button" value="PAYMENT"/>

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FIG.20

http://www.jba.somenet/		
JAPAN-B AIRLINE		
<u>INTERNET RESERVATION SERVICE</u>		
DATE:	<input type="text" value="MONTH"/>	<input type="text" value="DAY"/>
FROM	<input type="text"/>	TO <input type="text"/>
NUMBER OF SEATS	<input type="text"/>	<input type="button" value="VACANT SEAT CHECK"/>
<u>COMPLETED RESERVATION</u>		
• MARCH 10, JBA135 TOKTO 7:00 → SAPPORO 8:00, 1 SEAT		

FIG.21

http://www.jba.somenet/		
JAPAN-B AIRLINE		
<u>INTERNET RESERVATION SERVICE</u>		
DATE:	<input type="text" value="MARCH"/>	<input type="text" value="12"/>
FROM	<input type="text" value="SAPPORO"/>	TO <input type="text" value="TOKYO"/>
NUMBER OF SEATS	<input type="text" value="1"/>	<input type="button" value="VACANT SEAT CHECK"/>

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FIG.22

http://www.jba.somenet/reserve				
JAPAN-B AIRLINE				
<u>SEAT AVAILABILITY STATUS</u>				
DATE : MARCH 12, FROM SAPPORO TO TOKYO, 1 SEAT				
FLIGHT NO.	DEPARTING	ARRIVING		
JBA240	6:00	7:00	AVAILABLE	<input type="button" value="RESERVE"/>
JBA242	9:00	10:00	FULL	
JBA246	13:00	14:00	AVAILABLE	<input type="button" value="RESERVE"/>
JBA248	16:00	17:00	FULL	

FIG.23

http://www.jba.somenet/check	
JAPAN-B AIRLINE	
<u>RESERVATION CONFIRMATION</u>	
DATE : MARCH 12, FROM SAPPORO TO TOKYO, 1 SEAT	
FLIGHT NO.	DEPARTING ARRIVING
JBA246	13:00 14:00
IF YOU WISH TO CONTINUE RESERVATION,	<input type="button" value="CONTINUE RESERVATION"/>
IF YOU WISH TO GO TO PAYMENT, AND:	
WANT TO USE TMS FOR PAYMENT,	<input type="button" value="PAY BY TMS"/>
WANT TO USE OTHER WAYS OF PAYMENT,	<input type="button" value="PAYMENT"/>

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FIG.24

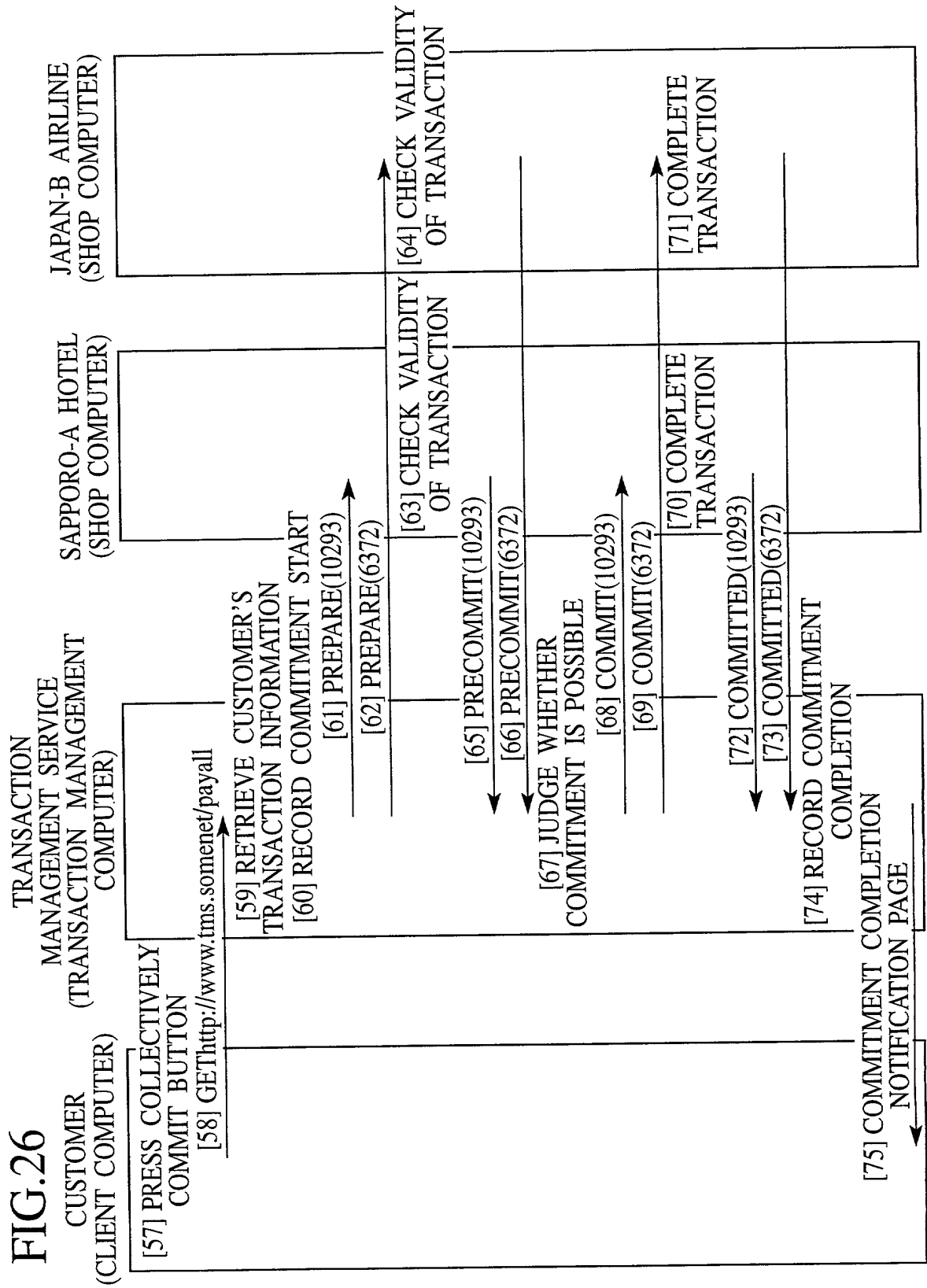
CUSTOMER ID	SHOP ID	TRANSACTION ID	COMMITMENT DATE & TIME	REGISTRATION DATE & TIME	STATE	CART MESSAGE	COMPLETION MESSAGE
hiroshi.yamada	sah	10293		1999/12/23 10:34	ACTIVE	ROOM FOR 2 DAYS FROM MARCH 10, ¥20,000	
hiroshi.yamada	jba	6372		1999/12/23 10:35	ACTIVE	MARCH 10, TOKYO→SAPPORO JBA135 MARCH 12, SAPPORO→TOKYO JBA246 ¥40,000	
hiroshi.yamada	raptorgift	93849	1999/12/17 19:46	1999/12/17 19:44	COMMITTED	ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800	FOLLOWING ORDERS ARE COMPLETED. ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800
hiroshi.yamada	abcflower	230	1999/12/3 15:12	1999/12/3 15:11	COMMITTED	10 ROSES, ¥500 10 STOCKS, ¥700	FOLLOWING ORDERS ARE COMPLETED. 10 ROSES, ¥500 10 STOCKS, ¥700
hiroshi.yamada	xyzfood	4928	1999/12/3 15:12	1999/12/3 15:10	COMMITTED	10Kg RICE, ¥4,500	FOLLOWING ORDERS ARE COMPLETED. 10Kg RICE, ¥4,500
taro.tanaka	xyzfood	5932		1999/12/10 17:26	ABORTED	1 BOX NOODLES, ¥5,000	
taro.tanaka	abcflower	489	1999/12/5 15:43	1999/12/5 15:42	COMMITTED	BOUQUET, ¥3,500	FOLLOWING ORDERS ARE COMPLETED. BOUQUET, ¥3,500

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FIG.25

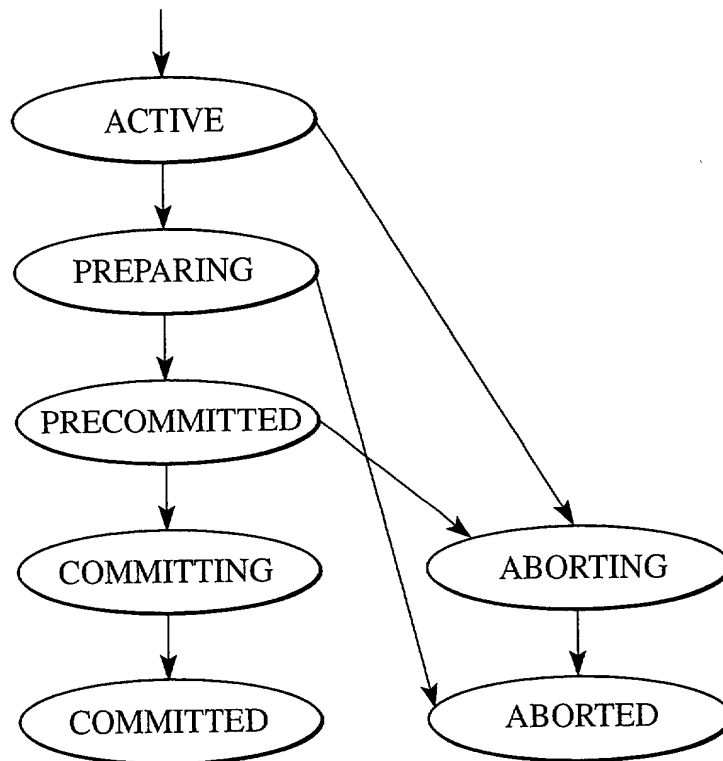
http://www.tms.somenet/			
TRANSACTION STATUS OF HIROSHI YAMADA			
▶ ITEMS CURRENTLY IN SHOPPING CART			
TOTAL	¥60,000	COLLECTIVELY COMMIT	COLLECTIVELY ABORT
SAPORO-A HOTEL ROOM FOR 2DAYS FROM MARCH 10, ¥20,000		SEPARATELY COMMIT	SEPARATELY ABORT
JAPAN-B AIRLINE MARCH 10, TOKYO →SAPORO, JBA135 MARCH 12, SAPORO →TOKYO, JBA246 ¥40,000		SEPARATELY COMMIT	SEPARATELY ABORT
▶ PAST TRANSACTIONS			
THIS MONTH (DECEMBER, 1999)			
LAST MONTH (NOVEMBER, 1999)			
OLDER TRANSACTIONS			

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FIG.27



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FIG.28

CUSTOMER ID	SHOP ID	TRANSACTION ID	COMMITMENT DATE & TIME	REGISTRATION DATE & TIME	STATE	CART MESSAGE	COMPLETION MESSAGE
hiroshi.yamada	sah	10293	1999/12/23 10:36	1999/12/23 10:34	PREPARING	ROOM FOR 2 DAYS FROM MARCH 10, ¥20,000	
hiroshi.yamada	jba	6372	1999/12/23 10:36	1999/12/23 10:35	PREPARING	MARCH 10, TOKYO→SAPPORO JBA135 MARCH 12, SAPPORO→TOKYO JBA246 ¥40,000	
hiroshi.yamada	raptorgift	93849	1999/12/17 19:46	1999/12/17 19:44	COMMITTED	ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800	FOLLOWING ORDERS ARE COMPLETED. ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800
hiroshi.yamada	abcflower	230	1999/12/3 15:12	1999/12/3 15:11	COMMITTED	10 ROSES, ¥500 10 STOCKS, ¥700	FOLLOWING ORDERS ARE COMPLETED. 10 ROSES, ¥500 10 STOCKS, ¥700
hiroshi.yamada	xyzfood	4928	1999/12/3 15:12	1999/12/3 15:10	COMMITTED	10Kg RICE, ¥4,500	FOLLOWING ORDERS ARE COMPLETED. 10Kg RICE, ¥4,500
taro.tanaka	xyzfood	5932		1999/12/10 17:26	ABORTED	1 BOX NOODLES, ¥5,000	
taro.tanaka	abcflower	489	1999/12/5 15:43	1999/12/5 15:42	COMMITTED	BOUQUET, ¥3,500	FOLLOWING ORDERS ARE COMPLETED. BOUQUET, ¥3,500

FIG. 29

CUSTOMER ID	SHOP ID	TRANSACTION ID	COMMITMENT DATE & TIME	REGISTRATION DATE & TIME	STATE	CART MESSAGE	COMPLETION MESSAGE
hiroshi. yamada	sah	10293	1999/12/23 10:36	1999/12/23 10:34	COMMITTED	ROOM FOR 2 DAYS FROM MARCH 10, ¥20,000	A ROOM FOR 2 DAYS FROM MARCH 10 IS RESERVED. THE RESERVATION NUMBER IS 741. PLEASE TELL THE RESERVATION NUMBER WHEN YOUR CHECK IN. ¥20,000 WILL BE CHARGED.
hiroshi. yamada	jba	6372	1999/12/23 10:36	1999/12/23 10:35	COMMITTED	MARCH 10, TOKYO→SAPPORO JBA135 MARCH 12, SAPPORO→TOKYO JBA246 ¥40,000	FOLLOWING RESERVATION IS MADE. MARCH 10, FROM TOKYO TO SAPPORO, JBA135 RESERVATION NUMBER C10135097 MARCH 12, FROM SAPPORO TO TOKYO, JBA246 RESERVATION NUMBER C12246103 TICKETS WILL BE DELIVERED TO YOUR HOME BY MARCH 1. ¥40,000 WILL BE CHARGED.
hiroshi. yamada	raptorgift	93849	1999/12/17 19:46	1999/12/17 19:44	COMMITTED	ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800	FOLLOWING ORDERS ARE COMPLETED. ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800
hiroshi. yamada	abcflower	230	1999/12/3 15:12	1999/12/3 15:11	COMMITTED	10 ROSES, ¥500 10 STOCKS, ¥700	FOLLOWING ORDERS ARE COMPLETED. 10 ROSES, ¥500, 10 STOCKS, ¥700
hiroshi. yamada	xyzfood	4928	1999/12/3 15:12	1999/12/3 15:10	COMMITTED	10Kg RICE, ¥4,500	FOLLOWING ORDERS ARE COMPLETED. 10Kg RICE, ¥4,500
taro.tanaka	xyzfood	5932		1999/12/10 17:26	ABORTED	1 BOX NOODLES, ¥5,000	
taro.tanaka	abcflower	489	1999/12/5 15:43	1999/12/5 15:42	COMMITTED	BOUQUET, ¥3,500	FOLLOWING ORDERS ARE COMPLETED. BOUQUET, ¥3,500

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FIG.30

<http://www.tms.somenet/pay>

DEAR HIROSHI YAMADA

THE FOLLOWING TRANSACTIONS ARE COMMITTED.

SAPPORO-A HOTEL

A ROOM FOR 2 DAYS FROM MARCH 10 IS RESERVED.
THE RESERVATION NUMBER IS 741.

PLEASE TELL THE RESERVATION NUMBER WHEN YOU
CHECK IN.

¥20,000 WILL BE CHARGED.

JAPAN-B AIRLINE

FOLLOWING RESERVATION IS MADE.

MARCH 10, FROM TOKYO TO SAPPORO, JBA135,
RESERVATION NUMBER C10135097

MARCH 12, FROM SAPPORO TO TOKYO, JBA246,
RESERVATION NUMBER C12246103

TICKETS WILL BE DELIVERED TO YOUR HOME BY MARCH 1.
¥40,000 WILL BE CHARGED.

THE TOTAL CHARGE OF ¥60,000 FOR THESE
TRANSACTIONS WILL BE WITHDRAWN FROM
YOUR SPECIFIED ACCOUNT ON JANUARY 31.
THANK YOU FOR SHOPPING VIA TMS.

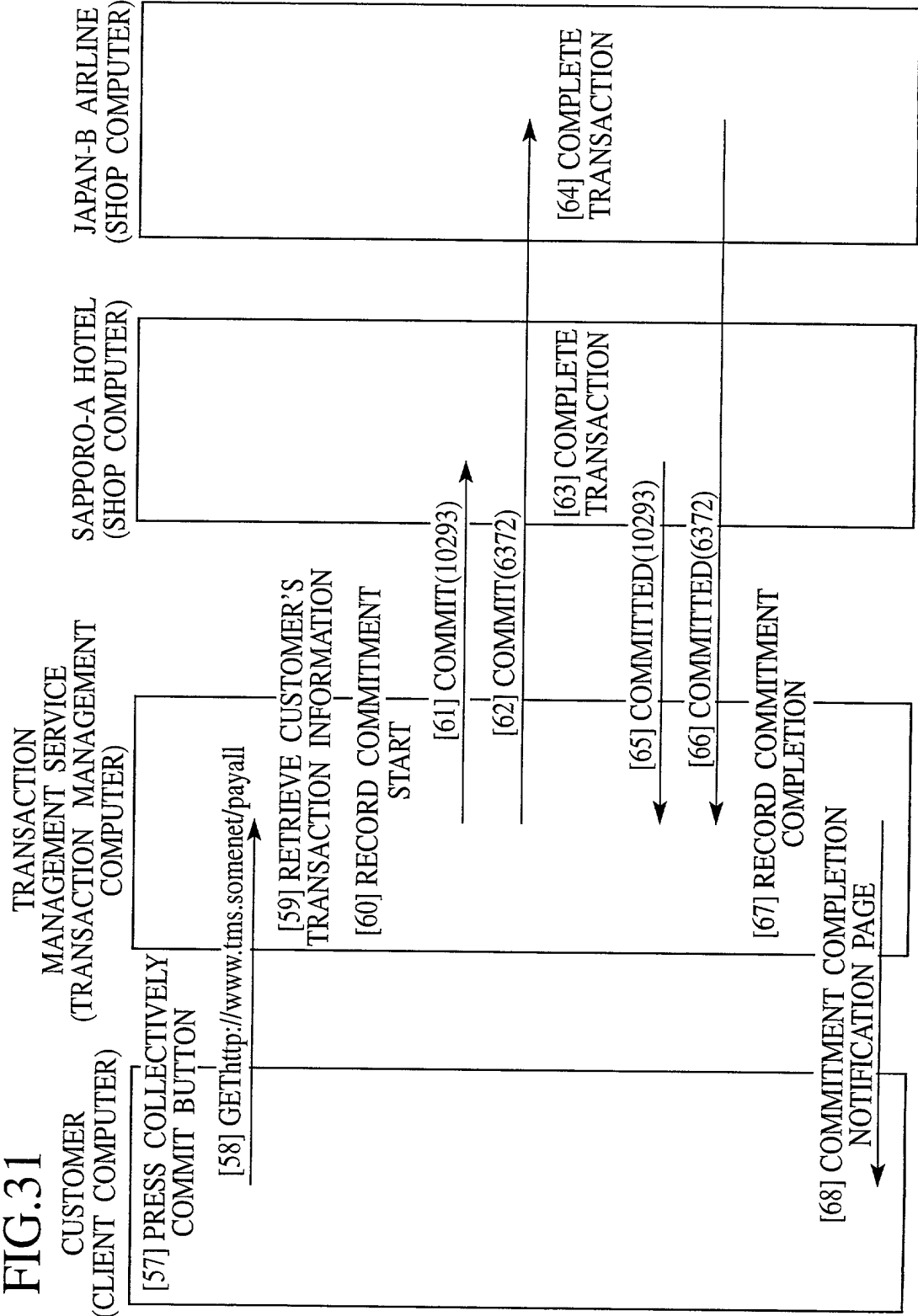


FIG.32

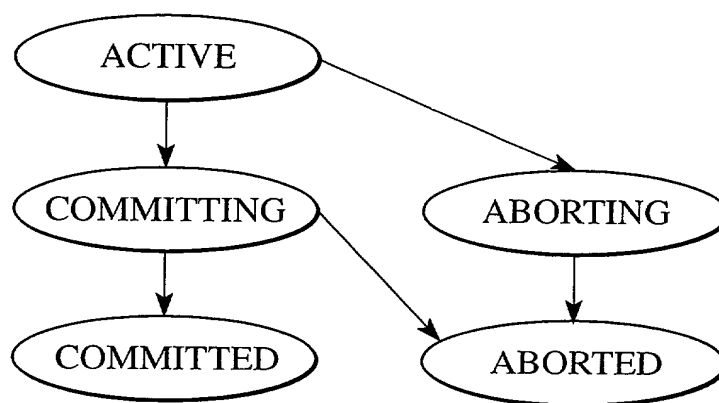


FIG.33

SHOPPING WINDOW

<http://www.jba.somenet/>

JAPAN-B AIRLINE

INTERNET RESERVATION SERVICE

DATE: MARCH 10

FROM TOKYO TO SAPPORO

NUMBER OF SEATS 1

VACANT SEAT CHECK

TRANSACTION STATUS OF
HIROSHI YAMADA

SHOPPING CART
TOTAL ¥20,000

COLLECTIVELY COMMIT

COLLECTIVELY ABORT

SAPPORO-A HOTEL
A ROOM FOR 2DAYS
FROM MARCH 10, ¥20,000

COMMIT

ABORT

PAST TRANSACTIONS

THIS MONTH (DECEMBER, 1999)

LAST MONTH (NOVEMBER, 1999)

OLDER TRANSACTIONS

DISPLAY SCREEN

SHOPPING CART WINDOW

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FIG.34

http://www.tms.somenet/thismonth			
TRANSACTION STATUS OF HIROSHI YAMADA ON THIS MONTH (DECEMBER, 1999)			
DECEMBER 3	<table border="1"><tr><td><u>ABC FLOWERS</u> 10 ROSES, ¥500 10 STOCKS, ¥700</td><td><u>XYZ FOODS</u> 10Kg RICE, ¥4,500</td></tr></table>	<u>ABC FLOWERS</u> 10 ROSES, ¥500 10 STOCKS, ¥700	<u>XYZ FOODS</u> 10Kg RICE, ¥4,500
<u>ABC FLOWERS</u> 10 ROSES, ¥500 10 STOCKS, ¥700	<u>XYZ FOODS</u> 10Kg RICE, ¥4,500		
DECEMBER 17	<table border="1"><tr><td><u>RAPTOR GIFT SHOP</u> ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800</td></tr></table>	<u>RAPTOR GIFT SHOP</u> ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800	
<u>RAPTOR GIFT SHOP</u> ASSORTED CHOCOLATES, ¥2,500 STUFFED TOY, ¥3,800			
▶ PAST TRANSACTIONS			
<table border="1"><tr><td>LAST MONTH (NOVEMBER, 1999)</td></tr></table>		LAST MONTH (NOVEMBER, 1999)	
LAST MONTH (NOVEMBER, 1999)			
<table border="1"><tr><td>OLDER TRANSACTIONS</td></tr></table>		OLDER TRANSACTIONS	
OLDER TRANSACTIONS			

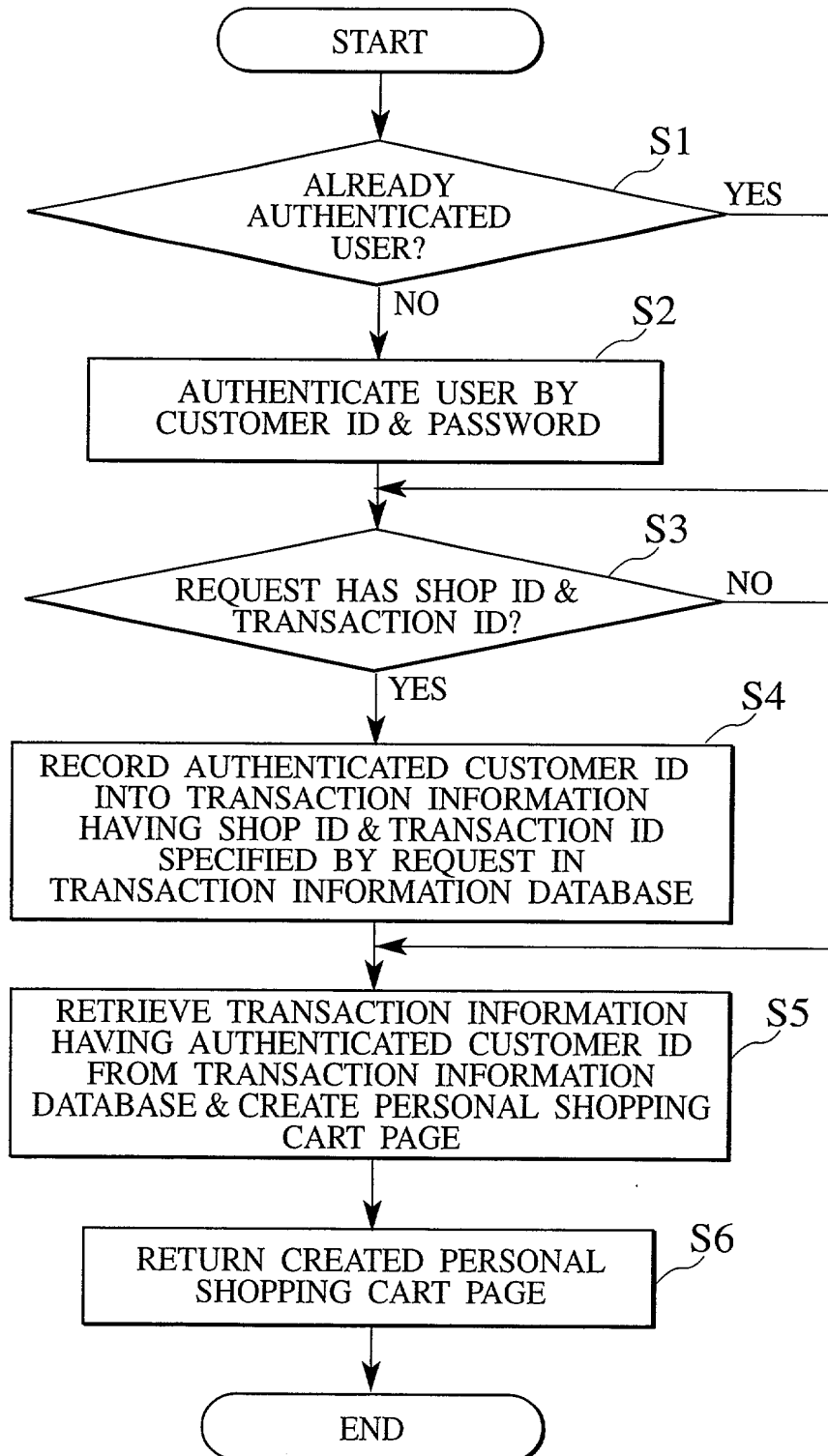
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FIG.35

http://www.tms.somenet/	
TRANSACTION STATUS OF HIROSHI YAMADA	
▶ ITEMS CURRENTLY IN SHOPPING CART	
TOTAL ¥0	<div>COLLECTIVELY COMMIT</div> <div>COLLECTIVELY ABORT</div>
FOLLOWING TRANSACTIONS ARE ABORTED AS THEY ARE NOT COMMITTED FOR LONG TIME	
DECEMBER 23	<div>SAPPORO-A HOTEL A ROOM FOR 2DAYS FROM MARCH 10, ¥20,000</div> <div>JAPAN-B AIRLINE MARCH 10, TOKYO →SAPPORO, JBA135 MARCH 12, SAPPORO →TOKYO, JBA246 ¥40,000</div>
▶ PAST TRANSACTIONS	
<div>THIS MONTH (DECEMBER, 1999)</div> <div>LAST MONTH (NOVEMBER, 1999)</div> <div>OLDER TRANSACTIONS</div>	

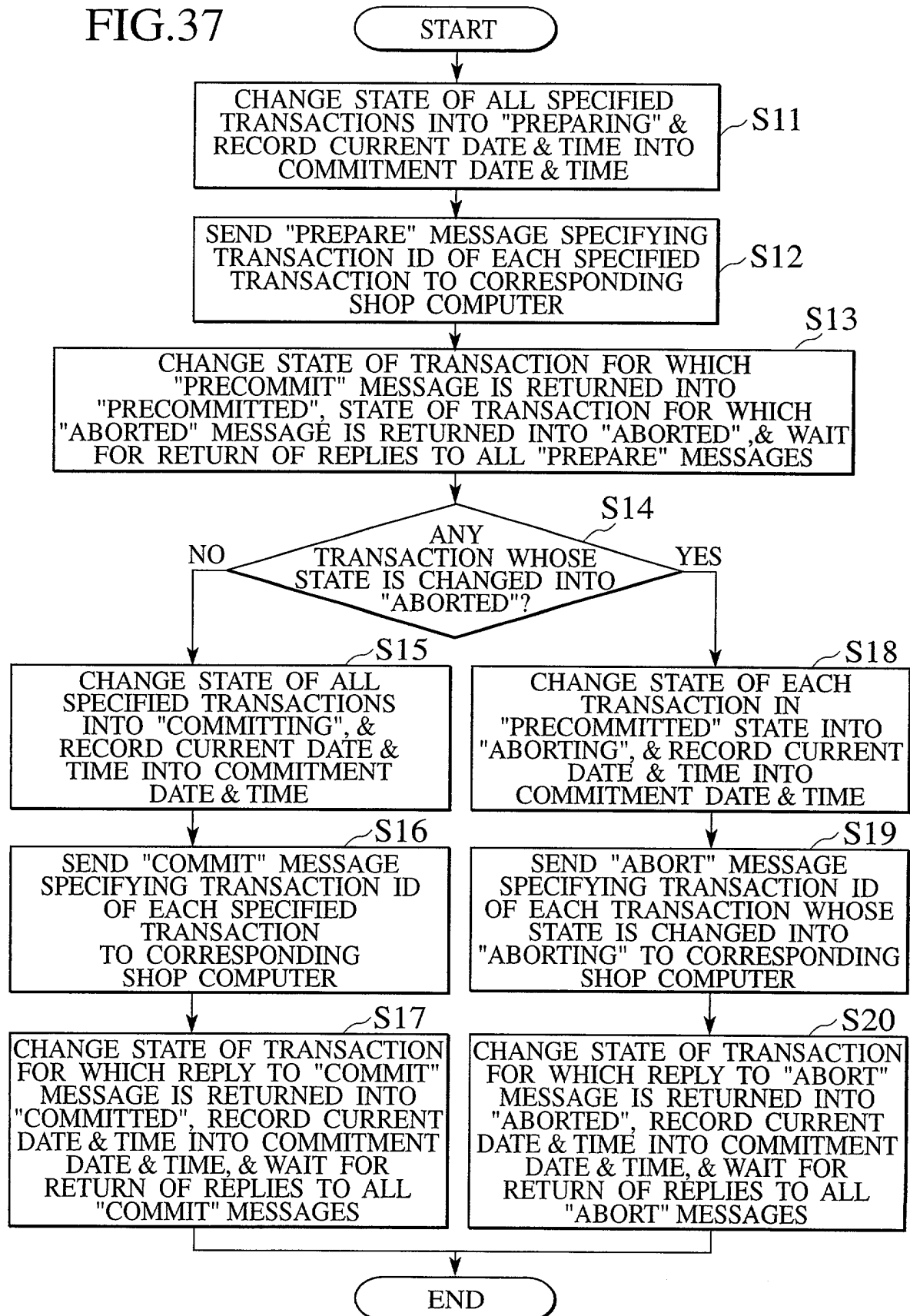
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FIG.36



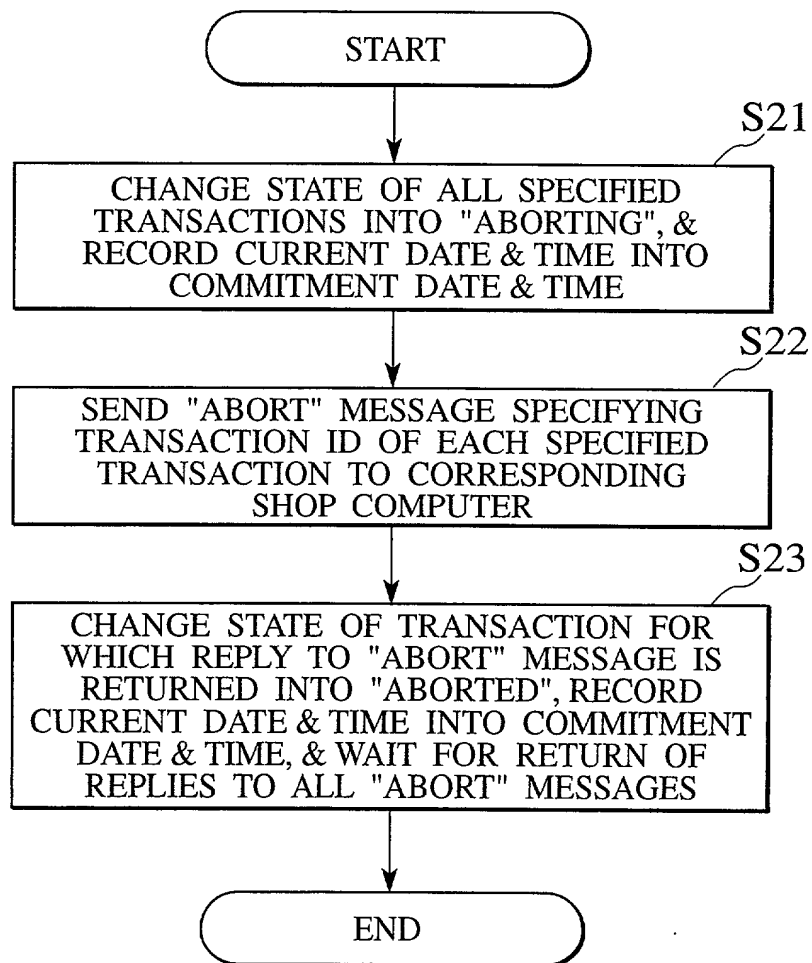
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FIG.37



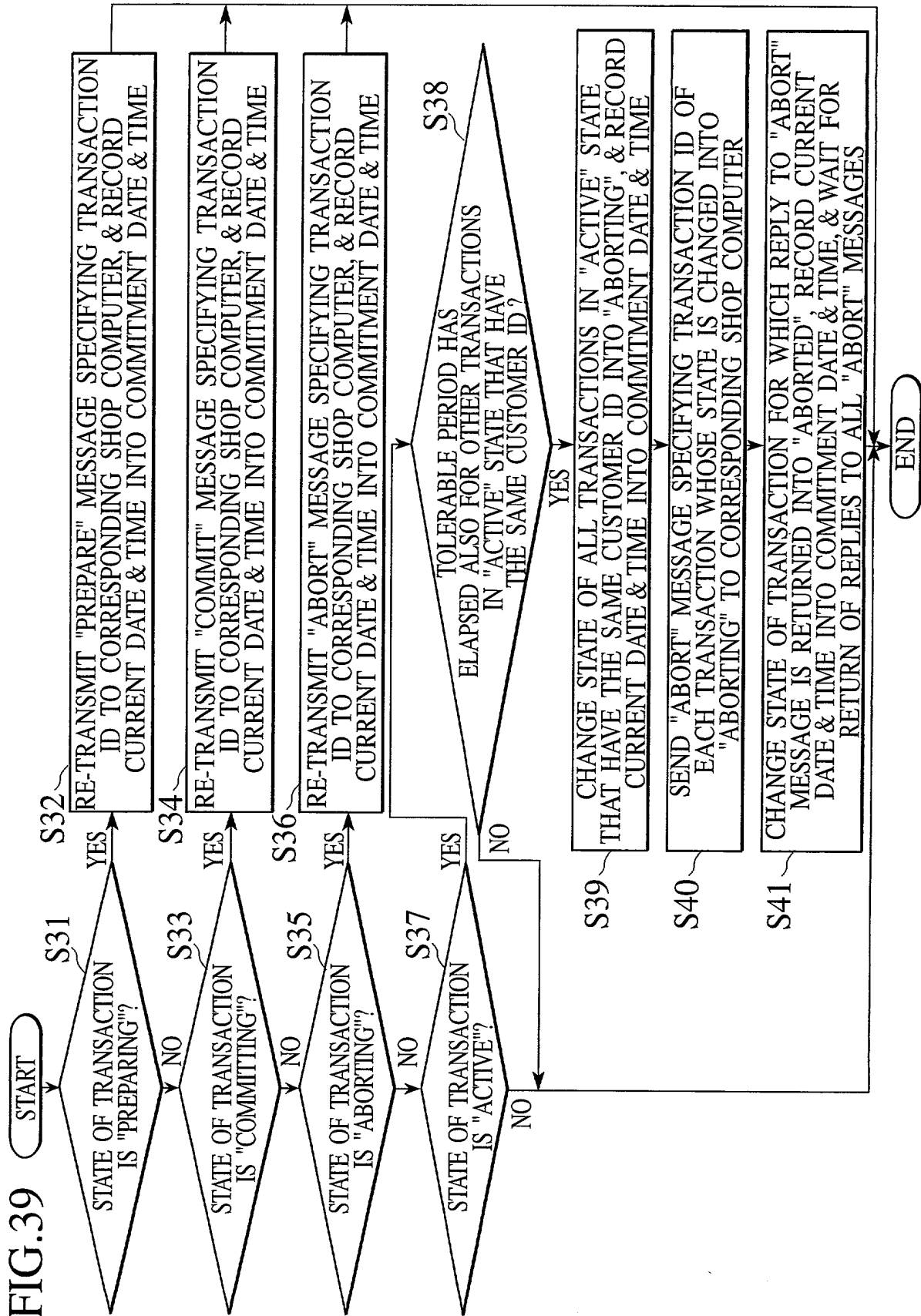
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FIG.38



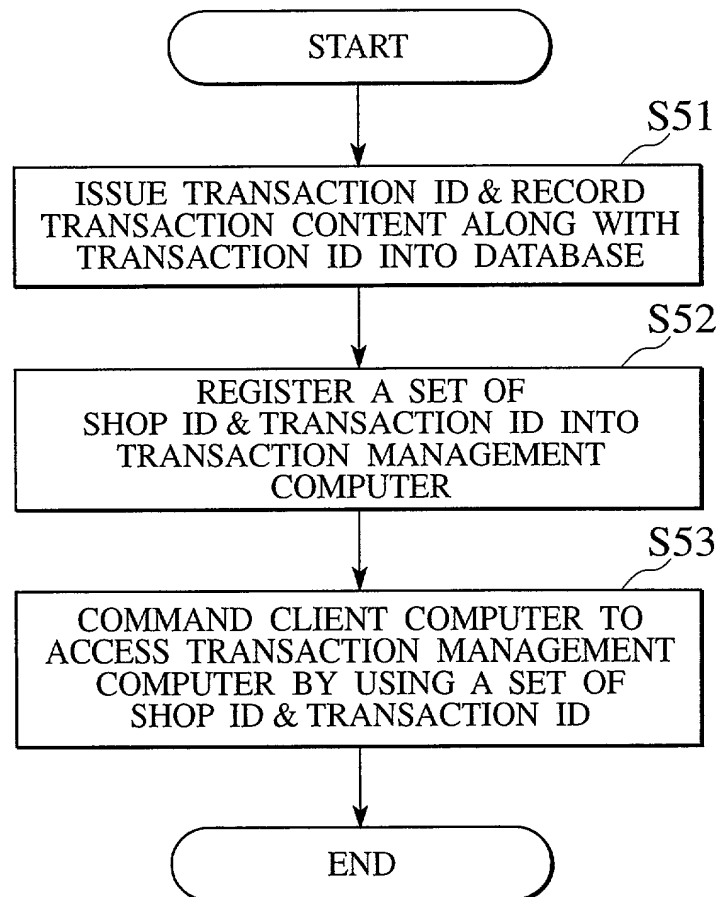
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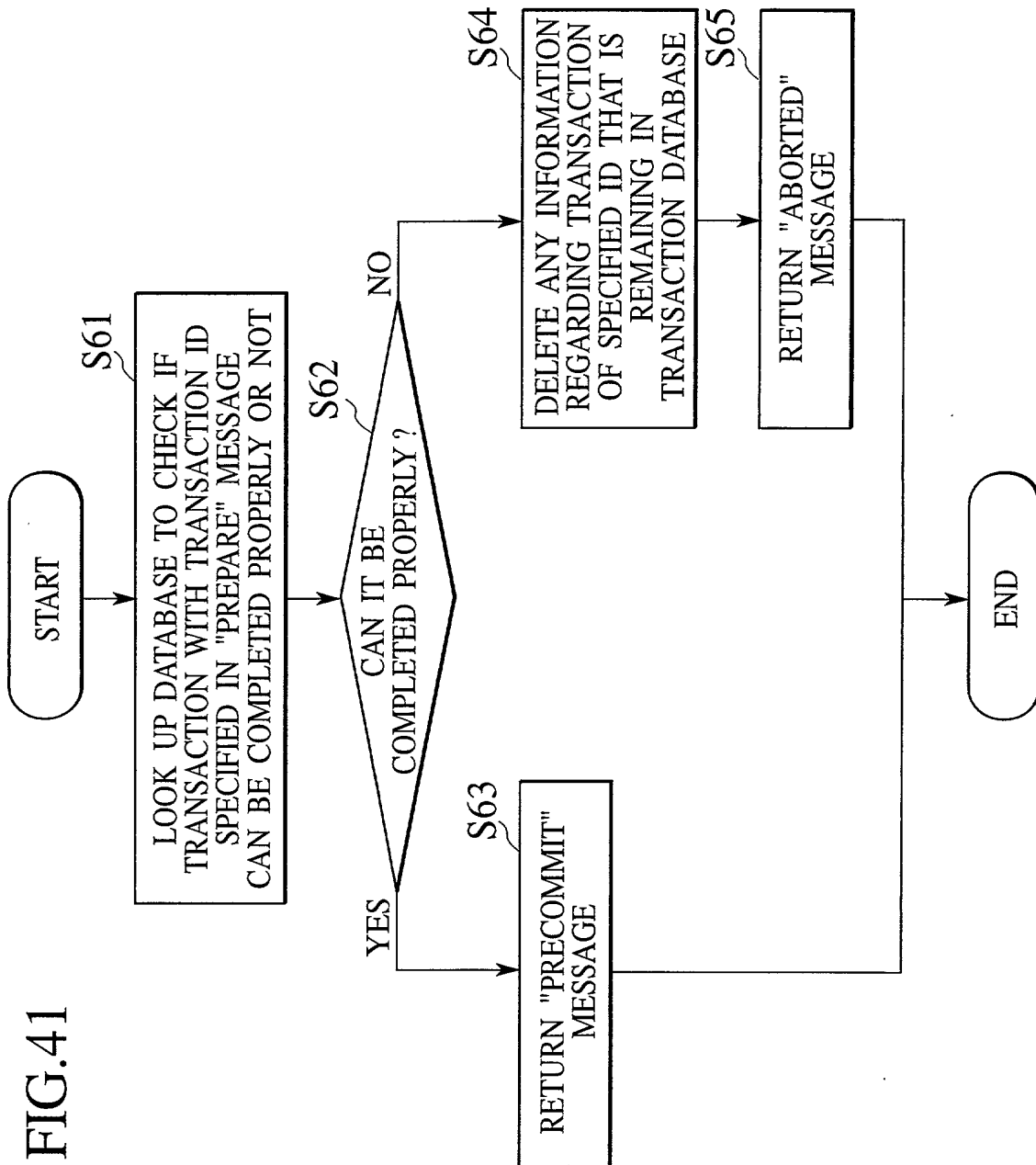
FIG.39



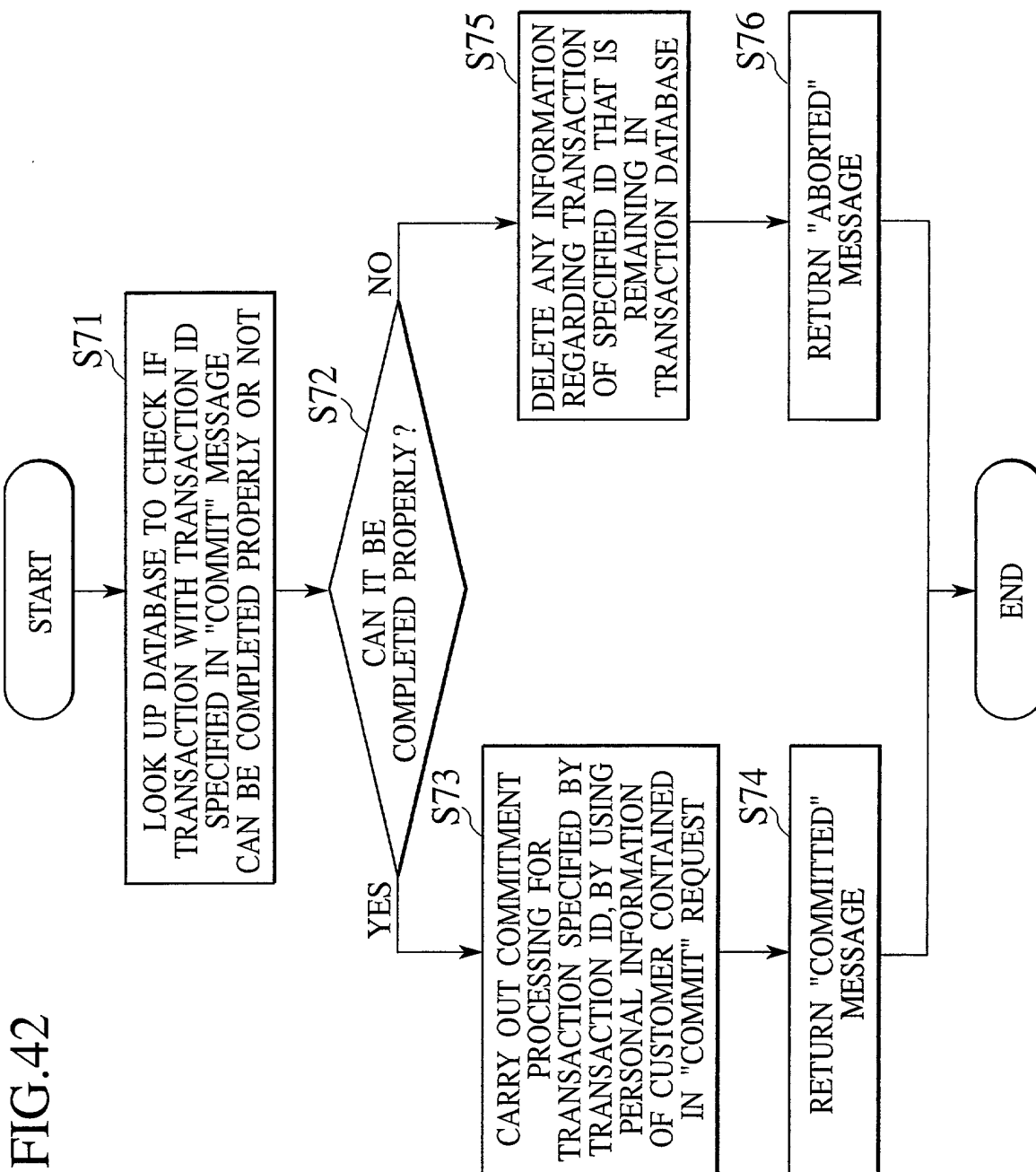
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FIG.40





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FIG.43

